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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/489,515	01/21/2000	Surya Prakash	06618-408001	5938

20985 7590 11/18/2003

FISH & RICHARDSON, PC  
12390 EL CAMINO REAL  
SAN DIEGO, CA 92130-2081

EXAMINER

MERCADO, JULIAN A

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 11/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

ab18

**Office Action Summary**

Application No.

09/489,515

Applicant(s)

PRAKASH ET AL.

Examiner

Julian A. Mercado

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 August 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 8-26 is/are pending in the application.
- 4a) Of the above claim(s) 1-5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 6, 8-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \*   c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

Art Unit: 1745

## DETAILED ACTION

### *Remarks*

This Office Action is responsive to applicant's amendment filed August 29, 2003.

Claims 1-6 and 8-26 are pending, of which claims 1-5 are withdrawn from consideration.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As discussed in the prior Office Action, claims 8 and 9 are presently dependent upon canceled claim 7 which renders the claims indefinite.

The examiner notes that applicant neither acknowledged nor responded to this ground of rejection.

### *Claim Rejections - 35 USC § 102 and 103*

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 6, 8, 9, 11, 12, 14, 15, 17-22, 25 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Cabasso et al. (U.S. Pat. 5,783,325)

Art Unit: 1745

Claims 16 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cabasso et al. as applied to claims 6, 8, 9, 11, 12, 14, 15, 17-22, 25 and 26 above.

Claims 10 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cabasso et al. as applied to claims 6, 8, 9, 11, 12, 14, 15, 17-22, 25 and 26 above, in view of Kindler. (U.S. Pat. 5, 992,008)

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cabasso et al. as applied to claims 6, 8, 9, 11, 12, 14, 15, 17-22, 25 and 26 above, in view of Scherer et al. (U.S. Pat. 5,656,386)

The above rejections have been discussed in detail in the previous Office Action. As the scope of the present claims are presented unamended from those considered in the previous Office Action, the prior art rejections are maintained for the reasons and for the additional reasons to follow in view of applicant's salient arguments.

Applicant's arguments that the DMA is used to form the "gas diffusion electrode with the controlled porosity; not to form the catalyst ink" has been fully considered, however they are not persuasive. [emphasis as submitted]

Applicant is correct that DMA is used to form the gas diffusion electrode, however, it is the examiner's position that DMA as a plasticizer is also used to form the catalyst ink. The disclosed plasticizers in Cabasso et al. include N,N-dimethyl acetamide (DMA) and N,N-dimethyl formamide (DMF), *inter alia*. (col. 7 line 63 et seq.) Example 1 (col. 9 line 53 et seq.) discloses that DMF is used in preparation of the gas diffusion electrode. Example 3 (col. 10 line 60 et seq.) specifically recites 10 wt. % Pt., i.e. the catalytic material, DMF as the plasticizer, and poly(vinylidene fluoride) or PVF<sub>2</sub> for the catalyst ink of the fuel cell. Examples 4-6 also recite

Art Unit: 1745

that the catalytic ink employs an organic solvent as the plasticizer. Thus, it is maintained without reservation that a plasticizer such as DMF (by way of example) or DMA (by way of disclosed equivalence) is used in formation of the catalyst ink.

The examiner notes that no arguments were set forth against the secondary references Kindler and Scherer et al. The rejection in view of these references are wholly maintained for the reasons discussed in the previous Office Action.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

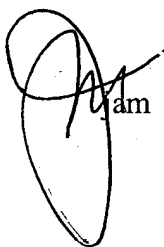
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian A. Mercado whose telephone number is (703) 305-0511. The examiner can normally be reached on Monday through Friday.

Art Unit: 1745

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (703) 308-2383. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

am

  
STEPHEN J. RYAN  
PATENT EXAMINER  
GROUP  
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